IAP20 Rec'd PCT/PTO 12 DEC 2005

Date Mailed: 12 December 2005

Sheet 1 of 1

FORM 1449* INFORMATION DISCLOSURE STATEMENT	Docket Number: Application Number 00758.1509USWO Unknown 960		
IN AN APPLICATION	Applicant: HOU et al.		
(Use several sheets if necessary)	Filing Date: 12 December 2005	Group Art Unit: Unknown	

			U.S. PATENT DOCUMEN	NTS				
EXAMINER INITIAL	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS		FILING DATE IF APPROPRIATE	
BT	US 6,487,852 B1	12/2002	Murphy et al.					
1	US 2002/178716 A1	12/2002	Hammerle et al.					
	US 5,950,422 A	9/1999	Doelling					
	US 6,119,448 A	9/2000	Emmerling et al.					
V	US 6,023,930	2/2000	Iwamoto et al.					
BT	US 2003/089104 A1	5/2003	Colignon					
		FO	REIGN PATENT DOCUM	IENTS				
	DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	TRANSI	LATION	
		·				YES	NO	
BT	EP 1 273 773 A2	1/2003	Europe					
P	EP 1 149 991 A2	10/2001	Europe					
V	DE 100 43 613 A1	2/2002	Germany			Abstract		
ВТ	EP 111 211 A2	6/2001	Europe					
	OTHER	DOCUMENT	'S (Including Author, Title,	Date, Pertinent F	Pages, Etc.)			
		 	<u> </u>					
			· • · · · · · · · · · · · · · · · · · ·					
	 							

23552 PATENT TRADEMARK OFFICE

			 ·
EXAMINER	/Binh Tran/	DATE CONSIDERED	01/22/2007

FORM 1449*

INFORMATION DISCLOSURE STATEMENT

IN AN APPLICATION

(Use several sheets if necessary)

Docket Number:

Application Number:

758.1509USWO

10/560,401

Applicant: HOU ET AL.

Filing Date: 12/12/2005

Group Art Unit: UNKNOWN

JUL 2 5 7006 27

PAREMENT	,	U	S. PATENT DOCUME	NTS		
EXAMINER INITIAL	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
BT	3,499,269	03/10/1970	Bois			
	3,654,432	04/04/1972	Dyre			
	3,744,249	07/10/1973	August			
	4,054,418	10/18/1977	Miller et al.			
	4,167,852	09/18/1979	Ludecke			
	4,211,075	07/08/1980	Ludecke et al.			
	4,270,936	06/02/1981	Mann			
	4,276,066	-06/30/1981	Bly et al.			
	4,303,552	12/01/1981	Ernest et al.			
	4,319,896	03/16/1982	Sweeney			
V	4,360,156	11/23/1982	Soth et al.			
BT	4,372,111	02/08/1983	Virk et al.			
ß	4,381,643	05/03/1983	Stark			
	4,391,095	07/05/1983	Virk			
	4,403,473	09/13/1983	Gladden			
	4,404,796	09/20/1983	Wade			
	4,449,362	05/22/1984	Frankenberg et al.			
	4,450,682	05/29/1984	Sato et al.			
	4,471,611	09/18/1984	Watanabe			
ľ	4,481,767	11/13/1984	Stark			
	4,485,621	12/04/1984	Wong et al.			
	4,485,622	12/04/1984	Takagi et al.			
	4,509,327	04/09/1985	Enga			
	4,510,265	04/09/1985	Hartwig			
W.	4,515,758	05/07/1985	Domesle et al.			
BT	4,549,398	10/29/1985	Oishi et al.			

			
EXAMINER	/Binh Tran/	DATE CONSIDERED	01/22/2007

FORM 1449* INFORMATION DISCLOSURE STATEMENT	Docket Number: 758.1509USWO	Application Number: 10/560,401
IN AN APPLICATION	Applicant: HOU ET AL.	
(Use several sheets if necessary)	Filing Date: 12/12/2005	Group Art Unit: UNKNOWN

BT	4,573,317	03/04/1986	Ludecke	
•	4,617,289	10/14/1986	Saito et al.	
	4,631,076	12/23/1986	Kurihara et al.	·
	4,670,020	06/02/1987	Rao	
	4,685,290	08/11/1987	Kamiya et al.	
	4,686,827	08/18/1987	Wade et al.	
	4,711,870	12/08/1987	Yamada et al.	
	4,719,751	01/19/1988	Kume et al.	
	4,730,455	03/15/1988	Pischinger et al.	
	4,759,918	07/26/1988	Homeier et al.	·
	4,835,964	06/06/1989	Kume et al.	
	4,851,015	07/25/1989	Wagner et al.	
V	4,878,928	11/07/1989	Wagner et al.	
ВТ	4,899,540	02/13/1990	Wagner et al.	
Λ	4,902,487	02/20/1990	Cooper et al.	·
	5,053,062	10/01/1991	Barris et al.	
	5,065,574	11/19/1991	Bailey	
	5,067,320	11/26/1991	Kanesaki	
	5,081,836	01/21/1992	Smith et al.	·
	5,082,478	01/21/1992	Oono et al.	
	5,083,427	01/28/1992	Anderson	
	5,094,075	03/10/1992	Berendes	
	5,097,665	03/24/1992	Kammel	
	5,100,632	03/31/1992	Dettling et al.	
	5,193,340	03/16/1993	Kamihara	
	5,272,874	12/28/1993	Paas	
	5,347,809	09/20/1994	Moeckel et al.	
V	5,355,973	10/18/1994	Wagner et al.	·
BT	5,394,692	03/07/1995	Teuber-Ernst	

		The state of the s	
EXAMINER	/Binh Tran/	DATE CONSIDERED	01/22/2007

(Use several sheets if necessary)

Group Art Unit: UNKNOWN

FORM 1449*
INFORMATION DISCLOSURE STATEMENT
IN AN APPLICATION

Docket Number:
758.1509USWO
10/560,401

Applicant: HOU ET AL.

Filing Date: 12/12/2005

BT	5,419,121	05/30/1995	Sung et al.
A	5,522,218	06/04/1996	Lane et al.
7	5,551,971	09/03/1996	Chadderton et al.
	5,709,080	01/20/1998	Arora et al.
	5,711,149	01/27/1998	Araki
	5,746,989	05/05/1998	Murachi et al.
	5,792,436	08/11/1998	Feeley et al.
	5,820,833	10/13/1998	Kawamura
	5,826,425	10/27/1998	Rossi Sebastiano et al.
	5,974,791	11/02/1999	Hirota et al.
	6,021,639	02/08/2000	Abe et al.
	6,024,927	02/15/2000	Ban et al.
V	6,182,443	02/06/2001	Jarvis et al.
BT	6,199,375 BI	03/13/2001	Russell
	6,237,326 BI	05/29/2001	Russell
	6,244,047	06/12/2001	Brehob et al.
	6,253,543 BI	07/03/2001	Russell
	6,322,605	11/27/2001	He et al.
	6,322,753	11/27/2001	Lindberg et al.
	6,347,511 B1	02/19/2002	Haines
	6,363,716	04/02/2002	Balko et al.
	2002/0044897 A1	04/18/2002	Kakwani et al.
	6,412,276 BI	07/02/2002	Salvat et al.
	6,449,947 BI	09/17/2002	Liu et al.
	6,471,918 BI	10/29/2002	Sherwood
	2002/0182134 A1	12/05/2002	Wu et al.
	2002/0178716 A1	12/05/2002	Hepburn et al.
U	6,497,095 B2	12/24/2002	Carberry et al.
BT	2002/0194835 A1	12/26/2002	Bromberg et al.

EXAMINE	R /Binh Tran/	DATE CONSIDERED	01/22/2007

FORM 1449* INFORMATION DISCLOSURE STATEMENT		Docket Number: 758.1509USWO	Application Number: 10/560,401
,	IN AN APPLICATION	Applicant: HOU ET AL.	
	(Use several sheets if necessary)	Filing Date: 12/12/2005	Group Art Unit: UNKNOWN

BT	6,526,746 B1	03/04/2003	Wu		· · · · · · · · · · · · · · · · · · ·		
^	6,526,753	03/04/2003	Bailey				
	6,550,573	04/22/2003	Wagner et al.				
	6,574,956 B1	06/10/2003	Moraal et al.				
	6,594,990 B2	07/22/2003	Kuenstler et al.	 			
	6,644,020 B2	11/11/2003	Kuenstler et al.				
	6,681,565 B2	01/27/2004	Russell				
	6,722,123 B2	04/20/2004	Liu et al.				
	2004/0093856 A1	05/20/2004	Dingle et al.				
1,	2004/0098975 A1	05/27/2004	van Nieuwstadt et al.				
₩	6,814,303 B2	11/09/2004	Edgar et al.				
BT	6,823,663 B2	11/30/2004	Hammerle et al.			<u> </u>	
Α.	6,834,498 B2	12/28/2004	van Nieuwstadt et al.				
1	2005/0000211 A1	01/06/2005	Fayard				
	6,862,879 B2	03/08/2005	Upadhyay et al.				
	6,882,929 B2	04/19/2005	Liang et al.				
	6,895,747 B2	05/24/2005	Upadhyay et al.				•
	6,928,806 B2	08/16/2005	Tennison et al.				
	6,973,776 B2	12/13/2005	van Nieuwstadt et al.		,		
	6,983,589 B2	01/10/2006	Lewis, Jr. et al.				
,	6,990,800 B2	01/31/2006	van Nieuwstadt et al.				
V	6,996,976 B2	02/14/2006	Rumminger et al.				
ВТ	7,000,383 B2	02/21/2006	van Nieuwstadt et al.				
· · · · · · · · · · · · · · · · · · ·		FOR	EIGN PATENT DOCUM	ENTS			
	DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLA	TION
						YES	NO
BT	889,019	09/16/1981	BE			х	
BT	199 46 901 A1	04/05/2001	DE			Abstract	
BT	0 070 619 A2	01/26/1983	EP				

EXAMINER	/Binh Tran/	DATE CONSIDERED	01/22/2007

FORM 1449*	INFORMATION DISCLOSURE STATEMENT	Docket Number: 758.1509USWO	Application Number: 10/560,401	
IN AN APPLICATION		Applicant: HOU ET AL.		
,	(Use several sheets if necessary)	Filing Date: 12/12/2005	Group Art Unit: UNKNOWN	

	<u> </u>	1				
BT	1 223 312 B1	10/27/2004	EP		Claims	
	2 064 983 A	06/24/1981	GB			
	2 076 696 A	12/09/1981	GB	<u> </u>		
	2 084 898 A	04/21/1982	GB			
	2 134 407 A	08/15/1984	GB			
	59-520	01/05/1984	16		Abstract	
	63-198717	08/17/1988	JP		Abstract	
	5-44435	02/23/1993	JP		Abstract	
V	10089057	04/07/1998	JP		Abstract Only	
BT	WO 01/34950 A1	05/17/2001	PCT			
	OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)					
BT	"Delavan	"Delavan Spray Technologies," Nozzle Technology, Coltec Industries, pp. 2.2-2.16 (Date Unknown)				
^	"Fact Shee	"Fact Sheet re: Diesel Particulate Matter," pp. 2-8 (Date Unknown)				
	"How a No	"How a Nozzle Works," pp. 3-5 (Date Unknown)				
	Catlin, C. et al., "Physical Processes Influencing Effervescent Atomizer Performance in the Slug and Annula Flow Regimes," <i>Atomization and Sprays</i> , Vol. 11, pp. 575-595 (2001) Fayard, J. et al., "A New DPF System for Duty Cycle Vehicles," <i>Technologies</i> , pp. 77-85 (2004)				ormance in the Slug and Annular	
					es, pp. 77-85 (2004)	
		Kim, J. et al., "Dependence of Spraying Performance on the Internal Flow Pattern in Effervescent Atomizers," Atomization and Sprays, Vol. 11, pp. 735-756 (2001)				
	Letebvre, H., "Effervescent Atomizers," Automization and Sprays, Taylor & Francis, 2 pages (1989)					
	Page, D. et al., "The QuadCAT™ Four-Way Catalytic Converter: An Integrated Aftertreatment System for Diesel Engines," SAE Technical Paper Series, pp. 1-8 (August 17-19, 1999)				ated Aftertreatment System for	
V	Sovani, S. (2001)	Sovani, S. et al., "Effervescent atomization," Progress in Energy and Combustion Science, Vol. 27, pp. 483-521 (2001)				
BT Suresh, A. et al., "A Study of the Effect of a Catalyzed Particu Diesel Engine with EGR," pp. 1-19 (2001)			Particulate Filter on the	ne Emissions from a Heavy-Duty		

23552 PATENT TRADEMARK OFFICE

EXAMINER /Binh Tran/	DATE CONSIDERED	01/22/2007